

This ~~measured~~<sup>measured</sup> tuft is removed from the combing frame as it is now deposited, by a knife, & falling into a receiving can below. The dressed tuft is laid so as to over-lap the last tuft, & thus a continuous sliver is formed, which is carried forward by rollers, & finally delivered, a beautiful milk-white roll, into its proper receptacle.

This combed wool must have been present to the mind of the Apostle when he wrote, of "his head this hairy white cloth like wool as white as snow"; - referring it to wool in this stage of preparation, the beauty & delicacy of the sheep appear, the words contain one of those delightful hints of prospect into the ways & arts of man, which proclaim, upon every page of the Bible, that "God doth instruct him to discretion": It is true, the art of 'combing' is said to have been invented in the second century, by the Bishop Blaise, the patron saint of the Worsted Trade: but the combs, which made red-hot, were the instruments of his martyrdom, may have been an improvement effected by the good Bishop upon another method of preparation.

The Combing is followed by the processes of Drawing & Roving, the object of which successive operations is pretty much the same, - to press several slivers into one, & to draw this one out until it is considerably thinner than either of the slivers of which it is formed. Half a dozen frames make 'A set of Drawing' & half a dozen, a set of Roving; which process differs from the Drawing in that the wool is loosely wound upon spindles instead of being delivered into a receiving can as in 3 of the 6 sets of Drawing frames; the roving is in fact a loose kind of spinning.

217 p. 2000. 84/19 22

which prepares the wool for the Throstle frame. By the operations of these doyly frames, the original sliver is doubled many times; indeed it is calculated that some quarter of a million doublings take place before the wool is finally spun; every doubling not only stretches & arranges each several fiber, but tends to distribute the ends of the fibers, so that, finally, it is very unlikely that two ends should fall together, & next to impossible that three should; - an arrangement upon which the strength of the yarn obviously depends. The principle of all these machines is pretty much the same; - a pair of rollers revolving slowly press the several clods into one, which a second pair of rollers, & that not, or a set of spindles, moving at a much quicker rate, draw out or attenuate in proportion to the speed with which they work.

The processes of spinning & weaving, though of infinite interest, are common to all textile manufacture need not now be dwelt upon, still the dying operation is too complex a matter to be lightly touched upon. The spinning, is, in fact a continuation of the roving process: the yarn is known as 80s, 60s, 100s, & co on, according as 80 or 100 hanks are spun out of a lb. of wool. 100s yarn is exceedingly fine, but practically there is little demand for it; 30s is largely used, being employed in ordinary or somewhat coarse fabrics. Much of this yarn is exported though not half as much now as in the happier days of Bradford trade, - & delightful it is to an orderly mind to watch the operation of packing: yarn intended for exportation spun upon spindle-shaped paper cases, <sup>which</sup> are removed from the frames as they stand

17 Dec 1862

Spun in large crates, row upon row, send between  
ends as nearly compactly as the cells of a  
honey-comb; the whole bulk is finally reduced by  
means of a heavy press. ~~Nothing~~ <sup>Indeed</sup> strikes  
a visitor more than the extreme neatness, order, &  
promptitude, of all the arrangements in a Mill.

In order to see the ~~silence~~ <sup>process</sup> ~~in~~  
~~by means of which~~ <sup>the</sup> ~~over~~ ~~you have~~ <sup>are</sup> ~~surrounded~~ <sup>by</sup>  
~~not have planned at~~, we are taken through one  
immense room after another, down the length  
of which, spinning, drawing, or other frames are  
 ranged in double file, each frame being  
 attended by women or girls, while a few men  
 or youths stand about as overseers. The  
 noise is deafening. Though we doubt the operators  
 get used to it, just as one might learn to  
<sup>invariably</sup> sleep with open windows in the one ~~corner~~ <sup>of</sup> ~~surrounding~~  
inspite of the roar of the water fall behind the  
house; & vastly different as are the associations  
belonging to men. The roar of machinery & the  
~~noise~~ <sup>that</sup> of a cataract are not unlike in themselves.  
This incessant din appeared to us the more  
peculiarly unpleasant circumstance connected  
with factory labour. The women & girls  
stand to their work, it is true, not so do shop-  
keepers; the girls who attend to the spinning-  
frames have some variety, as they must  
walk about a good deal from spindle  
to spindle, their business being to piece  
any broken threads which occurs in  
a long frame containing 120 or more  
spindles. This is doubtless some degree of  
strain upon the attention of the spinners, but

117 p. 226 comp. 1874

• look quiet & easy, as of their work did not  
affect them.

The weavers are, perhaps, a more intelligent,  
skilled class of operatives than the spinners.  
They earn higher wages. The magical  
stitch of this form ~~adapt~~ to edge of the warp,  
between the raised & depressed threads without  
any aid from them; although they usually  
handle the part of the loom which preserves each  
new weft thread close to the last, that we were  
told, was an excess of feminine zeal, and  
necessary part of their work. The value of  
the cloth depends, however, a good deal upon  
the weaver, whose business it is to see  
that no roughness, knot, or other imperfection  
disfigures the smooth surface.

Many of the children appeared to be employed  
~~parnumerous~~ as ~~supplementing~~ 'hands', required only  
when any frame needed to be replenished  
with material, &c., in the intervals, free to  
play at ~~at~~ <sup>with each other</sup> ~~amongst~~ ~~the~~ ~~children~~.

It would be better in mind that what is  
pleasant & easy work for an hour, may  
become insupportably fatiguing before  
the end of a day; we can only say that there is  
no apparent hardship in factory labour; it  
was truly pleasant to see 1500 persons em-  
ployed in a manner so little laborious  
in circumstances of so much general  
comfort: the rooms were in no case more  
than pleasantly warm, & must have been  
very well ventilated, so fresh was the air  
to be from the heavy city of Joras, one  
associates with a factory, <sup>the majority of whom are</sup> ~~in the~~ <sup>under</sup> ~~old~~ ~~days~~ ~~of~~ ~~ignorance~~  
~~or the~~ ~~shops~~. The labour is ~~too~~ called hills, <sup>the</sup> ~~old~~ ~~days~~ ~~of~~ ~~ignorance~~  
monotonous, is not considered severe; & as a  
class,

217p 23 Child 19 5

Class. The operatives have a fairly healthy, well & aspect which compares favorably with the hands of the Lancashire Cotton Mills. Yet there is a high rate of mortality in the factory districts, especially amongst infants and adult women, a circumstance which is not surprising when we learn that mothers leave their babies for fortnight, or even a week old, to resume work at the mills. The families of the operatives may be roughly divided into two classes, those in which the mother goes out to work, & those in which she stays at home to keep house. The latter class appear to enjoy a good deal of rough comfort, living in well-built cottages with two or three bedrooms ~~and~~ so kept for the most part, wholesomely clear if not too tidy. The living room is substantially furnished, the street door opening upon a small room chest of drawers, & the top upon which the family treasures are spread. The children are tenderly reared, but at nine or ten, they may go to the mills as half-timers, & the habit of early independence thus acquired, tell mischievously upon family life. They don't mind me,' the parents say, & appeal to School Board authorities & other outside help to aid them in the government of the children.

When the mother goes out to work, we may look for the worst side of family life, but in these cases the evils are simply those neglected home, & do not belong necessarily to labour in a factory. The provident, careful operative is well-fed, well-dressed well-housed. This in a house of his own, the purchase of

117

of savings put onto a Building Society, hence he  
has the self respect which comes of personal possession;  
he never obsequious & rarely boorish.  
Those who know the working people of the West Riding  
consider that the quality of 'democratic in-  
dependence' is perhaps their least lovely  
trait; but it is tempered by a friendliness  
which produces rough courtesy, by a strong  
instinctive love of fair play, some capacity  
to see both sides of a question, & also, by the  
power of being frank, open & acknowledging  
very heartily any service done them.

During the distress which has visited the town  
through the bad trade of the last few years, no  
operatives showed a grivier temper, patient industry,  
readiness to bear privation, & to do any sort  
of work at any wages. While the depression  
was at its worst, the corporations made efforts  
to provide work for the men; & groups of  
respectable citizens might be seen doing  
no work of masonry for a pollance of 4/- a day,  
with the sham-faced look in their familiar  
faces of men employed out of their own trade.

Putting aside times of exceptional  
distress, the condition of the working classes  
generally in Bradford is not without its  
ameliorations, foremost amongst these  
is the all but universal Saturday half-holiday,  
of which the Bradford folk make very  
excellent use. The town is situated in the midst  
of an exceptionally beautified & romantic district,  
half a dozen lovely spots in the sun valley;  
wild flowers, wooded dale, a breezy mons, are  
within

1878-1879 14 29

or their quarters far from railway journeys; others, for the half-day excursions which the railway companies provide for most summers Saturdays. There are the three days of Bolton, Fountains & Skipton, York & its Environs, Malham Cove & Gordale Scar.

Ingleborough leaves, & half a dozen other 'attractions', each of which on a week day will traverse the length of England to see. The railway platforms are a goodly sight on these weekly 'field days'; hundreds of happy families babies all, crowded into the carriages, take all the squeezing & pushing as excellent jokes, & keep up a fund of good humour & kindly helpfulness till they return at night, tired enough with unaccustomed walking & climbing, but full of the two-fold refreshment of air & novel impressions. No need for folk to stay away from any popular resort because it is the people's holiday; the place will be crowded, no doubt; but with a general humorously, civil, quite well-conducted crowd, such sports notwithstanding pleasure shall take its own.

Now are the presents of the Sunday less to the minds of the operatives as a class: the 'mill girls' form an important element in most congregations, while the Sunday schools have, say 'Select Classes' of young men & women - often full of desire for the best things, & more-pleasant-to-work-with. There is no doubt that the operative class finds

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Find much intellectual pleasure & receive much  
culture in their Sunday avocations, as is proved  
by the fact that attendance at Sunday School is  
continued even during married life in most  
manufacturing towns: the congregational singing  
of the Sunday is a real delight to people blessed  
with fine voices & less so, who are seldom  
without some degree of musical training.

The Bradford mills close at 5.30 p.m. giving the  
operatives a long evening to spend in pleasure  
seeking or upon personal improvement, for  
which many opportunities are put in their way.  
Elementary instruction is well provided for, &  
besides, there are evening classes for Art, Science,  
Mathematics, Languages, all well taught. & well  
attended by working people. We have only space  
now to notice one more fact illustrating of the status  
of the unskilled operatives in Bradford; the town has a  
free public library established under the  
recent act, which contains some 27,000 volumes  
and well supplied with the public journals. 9,000  
readers in the Juvenile Room & Reading Room  
is an ~~an~~ ordinary weekly average, 1,600  
of these being women, that is to say, upward  
of 1,300 persons, on an average, read in these  
rooms in a single day, & besides this, some  
5,000 borrowers take books to their homes.  
These numbers very fairly represent the  
'reading public' amongst the labouring  
classes, as excellent subscription  
libraries are supported by the town.

Charlotte H. Queen,

## A Morning in a Bradford Woollen Factory

Bradford lies in an elbow of the Aire valley - ~~which~~  
is known as Bradford Vale - within which are  
amphitheatre of hills, rather, the heart of the  
town is in the valley, while the suburban  
parts & some of the principal streets climb  
the slopes of the hills.

It is entirely a manufacturing town; from  
any over-looking hill-side one may reckon  
scores of factory chimneys, seen from  
such a point of view, the buildings stand  
thickly from behind a cloudy curtain  
of smoke. But having said this, we have said  
the worst of Bradford, which, for a manufacturing  
centre, is fairly attractive & pleasant as  
a place of residence. It is seldom that the  
fine air off the moors is perceptibly vitiated  
by the heavy factory odour; most of the  
mills are in quarters little frequented by  
the general passenger, so that the main  
thoroughfares are simply streets of good  
shops, like Manningham & Norton, the two  
suburbs in whose handsome villas the  
manufacturers & merchants live, are ex-  
cellently placed both as regards effect  
& the conditions of health. Manningham,  
in particular, has a really fine situation,  
commanding <sup>over</sup> the Thornton valley  
& the hills on the further side. It is  
true these last are bare enough, but a  
hill is a hill, & a green slope is pleasant.